



Equine Infectious Anemia

Facts

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What is Equine Infectious Anemia?

Equine Infectious Anemia (EIA), commonly called "*Swamp Fever*," is a viral disease that affects equines (horses, mules, ponies, and donkeys). The virus reproduces in blood cells that spread throughout the body. The horse's immune system, via antibodies, attacks the infected red blood cells destroying them, causing anemia. The impaired immune system can affect vital organs and also make the horse susceptible to secondary infections. EIA-infected horses remain infected for life, many without showing any signs of the disease.

How is Equine Infectious Anemia transmitted?

The virus is transmitted by infected blood transferred by blood-sucking insects, such as horse flies, deer flies and mosquitoes. Insects carry the virus in the residual blood on their mouthparts from one host to another, spreading the disease. The blood-borne virus can also be spread through the use of non-sterile needles, contaminated equipment or surgical instruments. EIA- infected mares can pass the virus through the placenta and /or the colostrum to their foals. After exposure to infected blood, the incubation period is 1-3 weeks but may be as long as 3 months.

EIA or "*swamp fever*" is associated with warm wet regions, but can occur anywhere there is a carrier (horse) and a vector (insect) to transmit it.

Does the disease affect other animals?

No. It only affects domestic equines such as horses, ponies, mules and donkeys.

What are symptoms of the disease?

The symptoms of EIA may vary from horse to horse and mimic other diseases, making a diagnosis difficult. The disease may not have any obvious symptoms or one or more of the following:

*intermittent fever *depression *decreased appetite *rapid breathing *sweating *rapid weight loss *bloodshot eyes with watery discharge *pale mucous membranes *swelling of legs, lower chest, and abdomen * wobbly or rolling gait from weakness *fatigue *irregular heartbeat and / or weak pulse *colic *abortion in mares

Equine Infectious Anemia generally has three forms:

- 1) Acute: rapid onset of disease symptoms with possible death
- 2) Chronic: fluctuates between remission and disease states
- 3) Inapparent: carries the virus with no signs of disease

It is important to contact your veterinarian for an examination and diagnostic testing if you have concerns about your horse.

How is the virus detected?

EIA is diagnosed by a blood test. The most commonly used method is the Coggins test, also known as the agar gel immunodiffusion (AGID) test. Dr. Leroy Coggins, a veterinary researcher, developed the test over 25 years ago. The test detects the presence of EIA-specific antibodies in the blood. A negative reading means there are no detectable antibodies at the time of testing. A horse that has been exposed to an infected horse should be re-tested in several months to confirm a negative result. A positive reading indicates the horse is infected and a carrier of the EIA virus for life.

The ELISA (enzyme-linked immunosorbent assay) test offers results more rapidly, but results may not be as accurate as the Coggins test. A positive ELISA reading is verified by the standard Coggins test.

What are the federal and state requirements?

All EIA tests are performed at approved laboratories. By law, positive test results are reported to state and federal Animal Health agencies. Federal agencies require that horses being imported from foreign countries test negative to the Coggins test and other tests. Each individual state has specific requirements regarding EIA testing and the movement of horses interstate, intrastate and in change of ownership. State agencies can give you their current regulations on test requirements. Testing takes time, so plan ahead.

Horses that are confirmed EIA test positive are euthanized, donated to a research facility or placed in a lifelong quarantine facility. This facility must be screened to prevent insects from spreading the disease and is located at least 200 yards from other horses. Transportation and housing of an EIA positive horse is severely restricted.

Washington State Department of Agriculture's Animal Health Program requires that all domestic equines (horses, ponies, mules and donkeys) over six months of age entering Washington state have record of a negative test within six months. Certain exemptions apply, so contact the State Veterinarian's Office for requirements.

Important Points in Treatment and Prevention

- There is no effective treatment or vaccination for EIA.
- Owner compliance with Coggins testing for interstate requirements is necessary.
- Suggest Coggins testing prior to purchasing a new horse, pony, mule or donkey.
- All equine events should require negative Coggins test for each equine participant.
- Coggins testing of horses residing in disease prevalent areas is recommended at least once a year.
- Disinfect/sterilize equipment or instruments between uses.
- Use disposable needles and syringes when vaccinating or medicating.
- Protect horses from biting insects and control insects in the horses' environment.

Where can I get additional information?

If you have any questions concerning Equine Infectious Anemia, Coggins testing or importation requirements, you may contact the State Veterinarian's Office at (360) 902-1878.

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